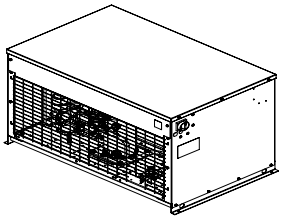
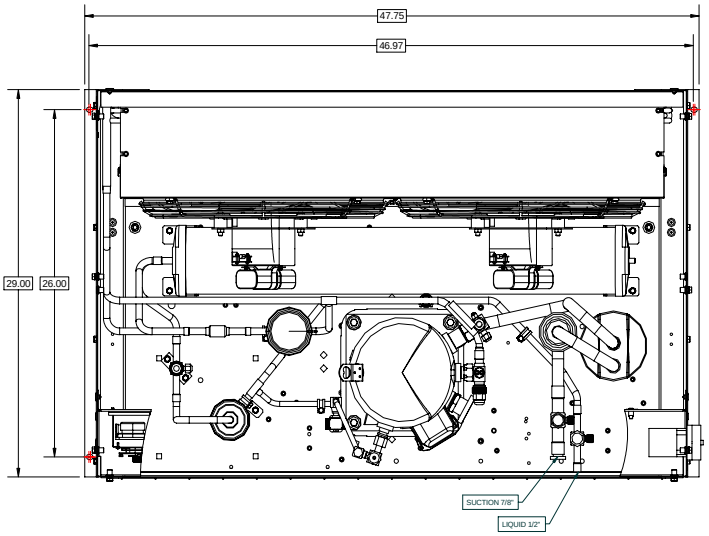
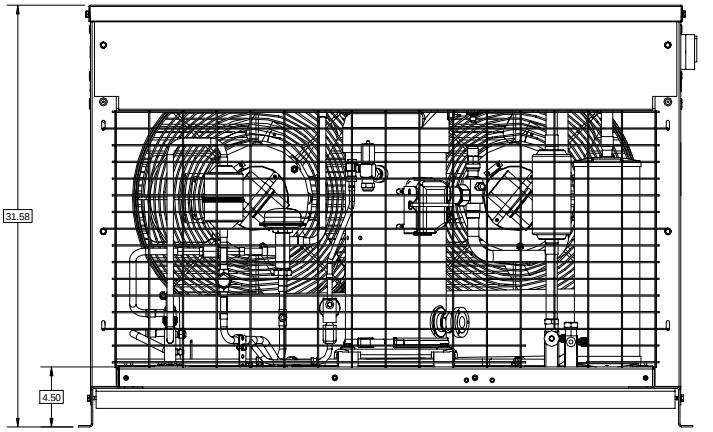
TECUMSEH HERMETIC CONDENSING UNIT

Model	**VSAG529ZXTHM**
BOM	**32L7242-2E**
Air Cooled	**7 ¼ HP**
Application	**Low Temp**
Refrigerant	**R404A**







	Dim. Enclosure(inch)*			Line connections		Pumpdown	Air flow	Oil Ch.	Gross weight
VSAG529ZXTHM	L	W	H	Suction	Liquid	90% @ 90°F	SCFM	Oz.	Lbs.
	29.40	47.75	31.58	7/8 Sweat	1/2 Sweat	37.69	4200	24	600

*) Enclosure Mounting Holes, 26.25 x 58.5

Factory charge 20 psig dry air, **MUST BE EVACUATED**

Evaporator		Ambient Temperatures															
		85°F				95°F				100°F				110°F			
T, °F	PSIG	BTUH	Watts	Head	Cond T	BTUH	Watts	Head	Cond T	BTUH	Watts	Head	Cond T	BTUH	Watts	Head	Cond T
-40	5.5	13400	4760	218	94	12700	5270	251	104	12400	5570	269	109	10900	6240	307	119
-35	8.0	15300	4890	222	96	14400	5390	255	105	13900	5690	273	110	12200	6330	310	120
-30	10.7	17400	5040	226	97	16200	5530	259	107	15700	5810	277	111	13800	6440	313	120
-25	14.0	19800	5200	231	99	18400	5670	263	108	17700	5950	281	112	15600	6570	317	121
-20	17.1	22400	5370	236	100	20700	5830	268	109	19900	6110	286	114	17700	6710	321	122
-15	19.3	25100	5550	241	102	23200	6010	273	110	22300	6280	291	115	19900	6870	326	124
-10	**24.5**	**28000**	**5750**	**247**	**103**	**25900**	**6200**	**279**	**112**	**24900**	**6470**	**296**	**116**	**22200**	**7050**	**331**	**125**
-5	28.8	31100	5960	253	105	28600	6410	285	113	27600	6680	302	118	24700	7250	337	126
0	33.5	34200	6190	259	107	31500	6640	291	115	30400	6910	308	119	27300	7470	343	127
5	36.5	37400	6440	265	108	34500	6900	297	117	33200	7160	315	121	30000	7720	350	129
10	43.7	40700	6710	272	110	37600	7170	304	118	36100	7430	322	122	32700	7990	357	130

Performance @ 60 Hz, Return gas 40°F, SubCooling 5°F

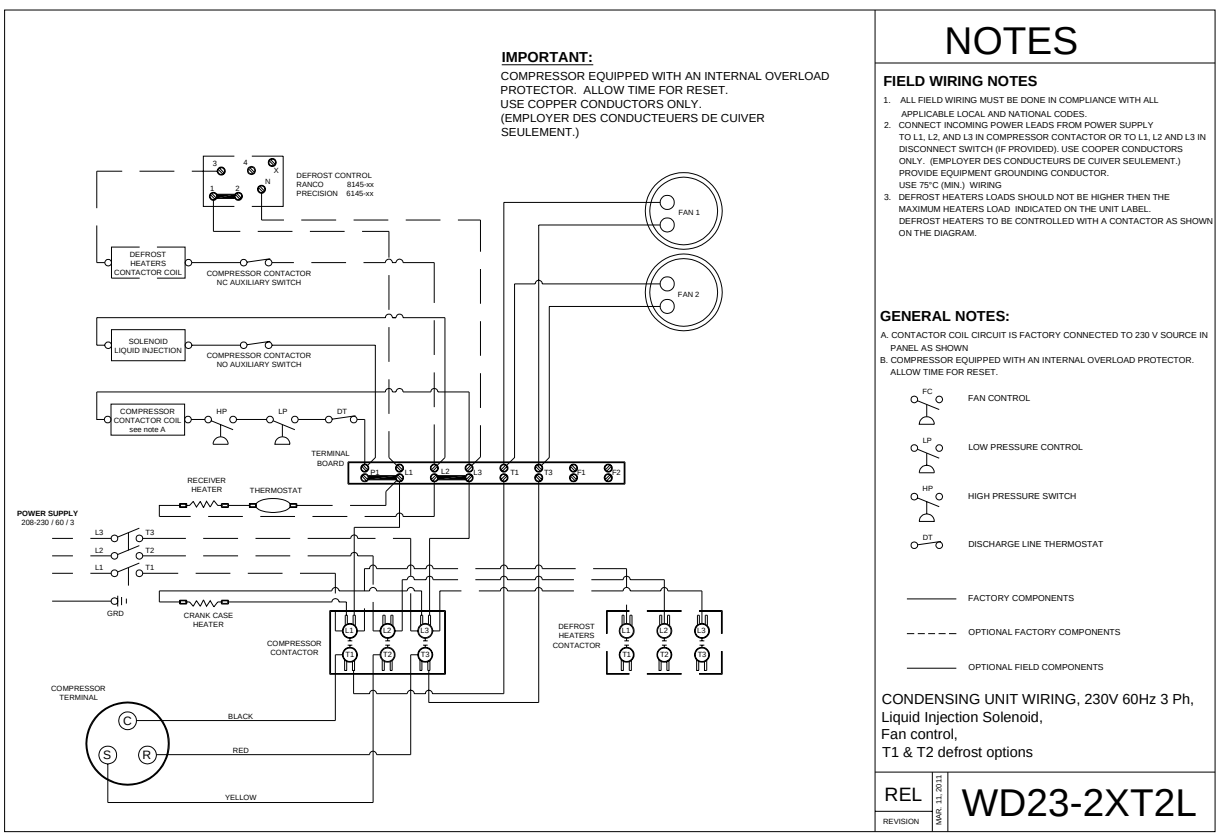
PRELIMINARY PERFORMANCE DATA

VSAG529ZXTHM
TPC___preliminary
October 14, 2011

Parts/Specifications

STANDARD

Unit BOM	**32L7242-2E**	Fan Motor	810S186B40	Adjustable Fan Ctrl (A)	LAFC-001
Unit MODEL	**VSAG529ZXTHM**	Fan Motor Qty	2		
		Fan Motor RLA	1.9	Defrost Timer (Tn)	LTCG-T2
Refrigeration RANGE	-40°F to 10°F	Fan Blade	51528-3		
Design Pressure Low	181	Fan Guard	70832		
Design Pressure High	450	Shroud	70611-1	Receiver Heater (R)	LHR-223
Volts - HZ - Ph	200-230V 3~ 60HZ				
Voltage Range	180 - 253	High Pressure switch	84095-2L	Solenoid Valve (S)	KSVC-285
Min. Circuit Ampacity	26.37	Low Pressure Control	84026-2		
Max. Fuse Size	45	Dual Pressure Conrol		Disconnect (D)	KDSG-601
Compressor MODEL	VSAG523ZXT	Condenser	50777-6		
Compressor BOM	VS120RT-006-A4	Head Master Valve	70107-1		
Compressor LRA	156.1	Check Valve	56627	**BOM INDEX DESCRIPTION**	
Compressor RLA	17.88	Process Valve			
		Liquid Valve			
OverLoad	INTERNAL	Suction Valve	31529-2	**32xYYYY- 2ERA(F)TnDS**	
Relay				E Enclosure	
Run Capacitor		Receiver	51084	R Receiver Heater	
Run Capacitor Rating		Receiver Qty	1	A Adjustable fan control	
Start Capacitor		Accumulator	TK00044000	F Fixed fan Control	
Start Capacitor Rating		Liquid Filter	52000-164D	T1 Defrost timer option	
Contactor	91014B	Sight Glass	70084-2	T2 Defrost timer & Defrost Heaters Contactor	
		Suction Filter	70822-5S	D Disconnect	
Unit Drawing	DGU1950-L302			S Solenoid liquid Valve (supplied loose)	
Wiring no Fan controls	WD23-2XT2L	CrankCase Heater	14947870		


IMPORTANT:
COMPRESSOR EQUIPPED WITH AN INTERNAL OVERLOAD PROTECTOR. ALLOW TIME FOR RESET.
USE COPPER CONDUCTORS ONLY.
(EMPLOYER DES CONDUCTEUERS DE CUIVER SEULEMENT.)
DEFROST CONTROL
RANCO 8145-xx
PRECISION 6145-xx
FAN 1
FAN 2
DEFROST HEATERS CONTACTOR COIL
COMPRESSOR CONTACTOR NC AUXILIARY SWITCH
SOLENOID LIQUID INJECTION
COMPRESSOR CONTACTOR NO AUXILIARY SWITCH
COMPRESSOR CONTACTOR COIL see note A
HP
LP
DT
TERMINAL BOARD
RECEIVER HEATER
THERMOSTAT
POWER SUPPLY 208-230 / 60 / 3
GRD
CRANK CASE HEATER
COMPRESSOR CONTACTOR
DEFROST HEATERS CONTACTOR
COMPRESSOR TERMINAL
BLACK
RED
YELLOW
NOTES
FIELD WIRING NOTES
1. ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.
2. CONNECT INCOMING POWER LEADS FROM POWER SUPPLY TO L1, L2, AND L3 IN COMPRESSOR CONTACTOR OR TO L1, L2 AND L3 IN DISCONNECT SWITCH (IF PROVIDED). USE COOPER CONDUCTORS ONLY. (EMPLOYER DES CONDUCTEURS DE CUIVER SEULEMENT.) PROVIDE EQUIPMENT GROUNDING CONDUCTOR. USE 75°C (MIN.) WIRING
3. DEFROST HEATERS LOADS SHOULD NOT BE HIGHER THEN THE MAXIMUM HEATERS LOAD INDICATED ON THE UNIT LABEL. DEFROST HEATERS TO BE CONTROLLED WITH A CONTACTOR AS SHOWN ON THE DIAGRAM.
GENERAL NOTES:
A. CONTACTOR COIL CIRCUIT IS FACTORY CONNECTED TO 230 V SOURCE IN PANEL AS SHOWN
B. COMPRESSOR EQUIPPED WITH AN INTERNAL OVERLOAD PROTECTOR. ALLOW TIME FOR RESET.
FC FAN CONTROL
LP LOW PRESSURE CONTROL
HP HIGH PRESSURE SWITCH
DT DISCHARGE LINE THERMOSTAT
FACTORY COMPONENTS
OPTIONAL FACTORY COMPONENTS
OPTIONAL FIELD COMPONENTS
CONDENSING UNIT WIRING, 230V 60Hz 3 Ph,
Liquid Injection Solenoid,
Fan control,
T1 & T2 defrost options
REL
REVISION
MAR. 11, 2011
WD23-2XT2L